

ABSTRACT

A semiconductor device comprising a semiconductor
5 chip having an active and a passive surface; the active
surface includes an integrated circuit and input/output
pads suitable for metallurgical contacts. Further, the
device has a protective plastic film (polyimide, epoxy
resin, or silicone) of controlled and uniform thickness (20
10 to 60 μm) selectively attached to the passive surface. The
film is suitable to absorb light of visible and ultraviolet
wavelengths, to remain insensitive to moisture absorption,
and to exert thermomechanical stress on the chip such that
this stress at least partially neutralizes the stress
15 exerted by an outside part after chip assembly.